



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification: G06F 17/30, G06F 3/06	A1	(11) International Publication Number: WO 00/45302 (43) International Publication Date: 03 August 2000 (03.08.2000)
(21) International Application Number: PCT/US00/01885 (22) International Filing Date: 25 January 2000 (25.01.2000) (30) Priority Data: 60/118,051 01 February 1999 (01.02.1999) US (60) Parent Application or Grant BARPOINT.COM, INC. [/]; (). ROTHSCCHILD, Leigh, M. [/]; (). ROTHSCCHILD, Leigh, M. [/]; (). CASELLA, Anthony, J. ; ().	Published	
(54) Title: INTERACTIVE SYSTEM FOR INVESTING PRODUCTS ON A NETWORK (54) Titre: SYSTEME INTERACTIF PERMETTANT DE RECHERCHER DES PRODUITS SUR UN RESEAU (57) Abstract <p>An interactive search system for use primarily with a global computer network, e.g. the Internet (18), using a product identifying barcode, such as a UPC code, to rapidly and effectively obtain a supply of related information for presentation to a user. A computer (12) may be used to input a UPC code, taken from a package or advertisement or pre-stored in the computer, to an implementing server on the network. The server (14) contains a database of product and manufacturer identifying UPC codes and uses the input UPC code and the database to identify the manufacturer and is programmed to then perform a search of the network to locate sites relating to or operated by the manufacturer. The server may search the network on a product basis to locate other sites containing the UPC under search.</p> (57) Abrégé <p>Système de recherche interactif destiné principalement à un réseau informatique mondial, tel qu'Internet (18), qui utilise un code à barres d'identification de produits, tel qu'un code universel de produits (UPC), pour obtenir rapidement et efficacement un ensemble d'informations pertinentes afin de les présenter à un utilisateur. Un ordinateur (12) peut être utilisé pour entrer un code UPC, pris sur un emballage ou une publicité ou préalablement mis en mémoire dans l'ordinateur, dans un serveur de mise en oeuvre faisant partie du réseau. Le serveur (14), qui contient une base de données de codes UPC identifiant les produits et les fabricants, utilise le code UPC entré et la base de données pour identifier le fabricant. Il est programmé pour effectuer ensuite une recherche dans le réseau afin de localiser les sites concernant le fabricant ou exploités par lui. Puis il peut faire des recherches dans le réseau sur la base du produit afin de localiser d'autres sites contenant l'UPC recherché.</p>		

PCT

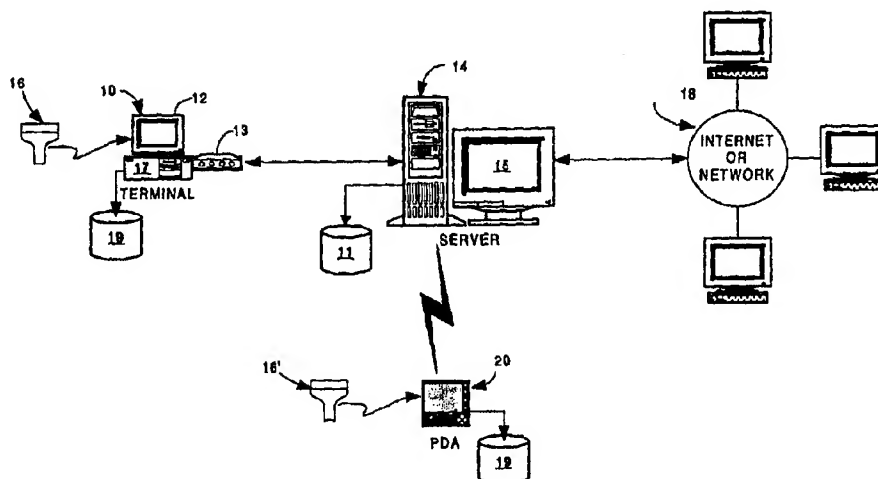
WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G06F 17/30, 3/06		A1	(11) International Publication Number: WO 00/45302
			(43) International Publication Date: 3 August 2000 (03.08.00)
(21) International Application Number: PCT/US00/01885		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 25 January 2000 (25.01.00)			
(30) Priority Data: 60/118,051 1 February 1999 (01.02.99) US			
(71) Applicant (for all designated States except US): BAR-POINT.COM, INC. [US/US]; One East Broward Boulevard, Suite 410, Fort Lauderdale, FL 33301 (US).			
(72) Inventor; and (75) Inventor/Applicant (for US only): ROTHSCILD, Leigh, M. [US/US]; 1540 Northeast Quayside Terrace, Miami, FL 33138 (US).			
(74) Agent: CASELLA, Anthony, J.; Casella & Hespos, Suite 1703, 274 Madison Avenue, New York, NY 10016 (US).		Published With international search report.	

(54) Title: INTERACTIVE SYSTEM FOR INVESTING PRODUCTS ON A NETWORK



(57) Abstract

An interactive search system for use primarily with a global computer network, e.g. the Internet (18), using a product identifying barcode, such as a UPC code, to rapidly and effectively obtain a supply of related information for presentation to a user. A computer (12) may be used to input a UPC code, taken from a package or advertisement or pre-stored in the computer, to an implementing server on the network. The server (14) contains a database of product and manufacturer identifying UPC codes and uses the input UPC code and the database to identify the manufacturer and is programmed to then perform a search of the network to locate sites relating to or operated by the manufacturer. The server may search the network on a product basis to locate other sites containing the UPC under search.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

Description

5

10

15

20

25

30

35

40

45

50

55

INTERACTIVE SYSTEM FOR INVESTING PRODUCTS ON A NETWORK

BACKGROUND OF THE INVENTION

1. Field of the Invention. The present invention relates to a system for searching an electronic network, such as the Internet, for product information, and, more particularly, to a method and means by which a user can quickly do a product search through databases on a global network with a simple input that enables interactive communication with a server adapted to widely seek and provide the information sought.

2. Description of the Related Art. Global electronic and computer networks, such as the Internet, provide access to a tremendous amount of information relating to various companies and their products. It is difficult, however, for a user to investigate a particular product on a global computer network when the product is sold under more than one name, or when the user is not sure of the proper name of the product. Similarly, the user may not know who is a manufacturer or a local supplier of the product. It therefore can be quite a time-consuming and complex procedure to do an effective product search through all of the web sites and databases available that may contain pertinent information.

In a different area of commerce, a system has been developed in the United States for product identification, primarily for use on an actual article, that is implemented with Uniform Product Codes (UPC's). This UPC system is administered by a Uniform Code Council. A manufacturer interested in utilizing the UPC system registers with the Uniform Code Council and receives a unique manufacturer code. At present, approximately 300,000 manufacturers are registered with the Uniform Code Council. Once registered, the manufacturer assigns codes to each of its own products. The UPC of a product is a combination of the manufacturer's code and a product code assigned by the manufacturer. To

5 facilitate product identification, the UPC is encrypted as a barcode and placed on
the product, where it is machine readable, such as by a scanner at a supermarket
checkout counter, and used to digitally identify the product. Once the product is so
10 identified, the digital barcode information read therefrom may be communicated to
5 many different destinations for accounting and inventory purposes and to various
databases for recording and archiving.

15 The UPC system has been adapted for use with computers and
networks, such as the Internet, in various ways. For example, U.S. Pat. No.
20 5,913,210, to C.C. CALL, discloses a system involving the storing of a plurality of
10 UPCs in respective computers with web addresses (URLs) and storing cross-
references of the UPCs and URLs in another computer (URL) which can be
accessed by further networked computers using the UPCs to find the respective
25 URLs. Also, U.S. Pat. No. 5,804,803, to B.J. CRAGUN ET AL, discloses the
retrieval of a document by a client computer system using a scanned UPC to create
30 15 a URL location in a first server, from UPC and customer data retrieved from a
second server, which URL may be used to obtain the document from the first
server. Further, U.S. Pat. No. 5,791,991, to M.E. SMALL, discloses an interactive
35 product promotion system which enables the selection of coupons to be
downloaded from the Internet, and then UPCs placed thereon to be scanned to the
40 20 Internet for rebates.

While the prior art is rife with search systems and techniques for
interacting with computer networks, and particularly the Internet, to obtain and
45 exchange information of all sorts, they all tend to be on a one-for-one or step-by-
step basis.

25 It is an object of the present invention to provide an interactive system

5 whereby an individual can quickly and easily obtain a supply of the available
information about a selected search object, such as a product and/or its
manufacturers, from a global computer network.

10 It is another object of the present invention to provide an interactive
5 method and means that enable an individual to search a global computer network
and easily obtain a supply of information regarding a selected product, based on a
15 barcode related to the product.

 It is a further object of the invention to provide an interactive system
20 for searching a computer network whereby information regarding products and
10 manufacturers can be quickly obtained, aggregated, and stored for use, based on a
product's UPC.

25 It is also an object of the present invention to provide an interactive
system for quickly and easily obtaining a supply of information about a selected
product and/or its manufacturers or providers from a server using a barcode related
30 to the product.
15

SUMMARY OF THE INVENTION

5 The above-stated objects are met by an interactive search system
that is directed to interact primarily with global computer networks, particularly the
10 Internet, using a product identifying barcode to rapidly and effectively obtain a
5 supply of product-related information for presentation to a user. In accordance with
the present invention, a suitable terminal, typically a desktop computer and modem
15 connection, is used to access an implementing server containing a database of
product and manufacturer or provider identifying codes, preferably UPC
20 manufacturer codes. Information relating to a particular product and its
10 manufacturer, is obtained with the product's UPC which may be taken from a
package or advertisement or pre-stored in the computer. The UPC can be entered
25 into the computer through manual input numerically, or, alternatively, entered
digitally through the use of software and a hand-held scanner adapted to read UPC
barcode encryptions. The desktop computer and modem transmit the entire UPC
30 15 to the implementing server, which reads the manufacturer's code from the UPC
and, using the UPC database therein, identifies the manufacturer. The server is
35 programmed to then perform a search of the global computer network or databases
contained in local server storage devices to locate sites relating to or operated by
the manufacturer. Additionally, the server may search the global computer network
40 20 on a product basis to locate other sites containing the UPC under search. To aid
the server, and reduce search time, it is preferred but not required that the user
45 identify the general category of the product (auto, book, music or movie cassette,
food, hardware, software, etc.) when the UPC is entered. Based on the
manufacturer information, and/or the selection of product category, the
25 50 implementing server is preferably programmed to initially search sites where a

5 greater likelihood of uncovering a particular UPC exists in addition to searching the
local server storage devices. Using "parsing" technology, the server may then "pull
10 out" the product description, transmit it to and place it in the random access
memory (RAM) or storage of the desktop computer, and proceed to perform further
5 searching relying on the product description to uncover relevant information. The
server can accordingly quickly assemble a collection of product-related and
15 manufacturer information in the RAM or storage of the desktop computer. The
collection of assembled information is then available for a user's consideration all at
once at any time. Preferably, the assembled information will provide the user with
20 the name of a source for purchasing the particular product, and, further, the server
will automatically link the computer with the source's site on the global computer
25 network, or a prearranged site on the server, to permit direct ordering. As will
readily be seen, the system of the invention permits an individual to avoid the time-
consuming hassle of performing multiple "key word" searches on the global
30 computer network to uncover the desired collection of product-specific information
15 on a step-by-step basis.

35 In an enhancement of the system, the UPC can be input into a
wireless portable computer, e.g., a Portable Digital Assistant (PDA), or a wireless
internet or server accessible phone and transmitted either directly or indirectly to the
40 implementing server to obtain product information. With this capability, a customer
20 can investigate a product while present in a retail location and contemplating
purchase of the product. The portable computer may be provided with software to
45 interact through a wireless transmission path with the server and obtain the
information as described above at the retail location. Conversely, PDA's have been
25 developed which include a scanner for reading an encrypted barcode and software
50

5 for deciphering and storing the encryption. These PDA's can be used advantageously to provide an individual with a handy tool for easily collecting UPC's while in conventional retail outlets for immediate or later use.

10 As another enhancement of the system, an additional database can
5 be created and located in an individual's desktop computer to maintain a library of UPC'S therein. For example, the UPC codes of various purchased products can be
15 entered into the library. The library of UPC's is then transmitted to the implementing server to allow for periodic monitoring of the global computer network to uncover relevant bulletins and/or notices. Thus, for instance, an individual who
20 purchases a product can enter the UPC code into the desktop computer, have the UPC code transmitted to the server, and be automatically informed of any notices
25 relating to the product (e.g., recalls or updates) or similar products. In a preferred embodiment, the server generates a hyperlink connection between the desktop computer and, by activation, the relevant site on the global computer network where
30 the notice is posted. Such an additional database may also be stored in a wireless portable computer to enable a user to readily investigate a range of products while present in a retail location.

35 The implementing server can also be directly linked to certain sites on the global computer network. Accordingly, a product manufacturer can have its site
40 linked to the server based on the UPC's of products it manufactures so that upon entry of one or more of the relevant UPC's, an individual will not only view information retrieved from the server's database, but also have his/her computer
45 connected to the linked site. Alternatively, a manufacturer may be permitted to set up a web page on the implementing server so that when a user enters the UPC of a
25 particular product he/she will directly communicate with the local web page for the
50

designated product.

It is to be understood that the use of UPC's with the subject invention is convenient, in that the UPC system is presently in place and widely used, but it is not actually necessary for its implementation. Alternative product identification systems, e.g., the International System of Book Numbers (ISBN), can also be used to initiate a search. Additionally, means may be provided for converting UPC's to such other product identification systems to expand and facilitate product searching. As a further alternative, the administrator of the implementing server/database can create a numeric/alphanumeric identification system or code which may be in machine readable (barcode) format for connecting to other information stored therein. By creating such a system, not only products, but also services and businesses can be assigned identification numbers. Such identification numbers also can be conveniently used to communicate with designated web pages on the server or the global network.

A further capability for facilitating network searching may be provided that enables a user to "plug in" to a graphical browser, such that by entering the category of product item to be searched followed by the UPC number in the URL entry line of the browser, the product search will be carried out directly without the user first having to go to a web site and then searching for the product information. Alternatively without a browser "plug in", the user could just enter a specific URL web address into any graphical global network browser with the optional category and with a UPC or code number to let the implementing server institute the search.

The system may also be used in sales promotions by enabling a manufacturer to place its UPC, or a server-supplied identifying code, whether in machine readable form or not on a magazine or newspaper ad, and directing that

the UPC or code be used to access the implementing server for further information.

A business card or letterhead may be similarly bar-coded to facilitate contacting a company or its website or e-mail address through the server. Further, a magazine

or periodical publisher may index the pages of a publication with such barcodes or

use existing barcodes enabling a user to readily order copies of articles or pages from a website or the server by e-mail or even allow the user to enter a discussion

group on the particular article or product.

BRIEF DESCRIPTION OF THE DRAWINGS

5

FIG. 1 is a block diagram illustrating a system in accordance with the present invention.

10

FIG. 2 is a flowchart illustrating an exemplary procedure for searching a global network in accordance with the present invention.

5

15

20

25

30

35

40

45

50

55

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

5 The present invention is directed to providing an electronic or
computerized search system that interacts primarily with global computer networks,
10 particularly the Internet, using a search-object-related code, such as a product or
5 manufacturer identifying barcode to rapidly and effectively obtain a supply of
product-related information for presentation to a user. In accordance with the
15 invention, as seen in FIG. 1, an individual, using a suitable terminal 10, typically a
desktop computer 12 and modem connection 13, can access an implementing
20 server 14 which is provided with a database 11 of product and manufacturer
10 identifying codes, preferably UPC manufacturer codes, and related information. To
obtain information relating to a particular product and its manufacturer, the
25 individual obtains the product's UPC such as from a package or advertisement.
The UPC can be entered into the computer 12 through manual input numerically,
or, alternatively, entered digitally through the use of software and a hand-held
30 15 scanner 16 adapted to read codes such as UPC barcode encryptions. The user
may then transmit the entire UPC from the desktop computer 12 through the
modem 13 to the implementing server 14. The server is programmed to read the
35 manufacturer's code from the UPC and, using the UPC database 11, identifies the
manufacturer. The server 14 may then be activated to send appropriate
40 20 information from a local site 15 therein back to the computer 12 for storage or
viewing, and to perform a search of the global computer network 18 or local site 15
to locate sites relating to or operated by the manufacturer. Additionally, the server
45 14 may search the global computer network 18 or local site 15 on a product basis to
locate other sites containing the UPC under search. To aid the server, and reduce
25 search time, it is preferred but not required that the user identify the general

category of the product (auto, book, music or movie cassette, food, hardware,
software, etc.) when the UPC is entered. Based on the manufacturer information,
and/or the selection of product category, the implementing server 14 is preferably
programmed to initially search sites where a greater likelihood of uncovering a
particular UPC exists. For example, there is a greater likelihood of uncovering a
UPC identified as corresponding to a food product in a food-related site, than at
other sites. Once a matching UPC has been located, the server 14 identifies the
product description associated therewith. Using "parsing" technology, the server
may then "pull out" the product description, transmit it to and place it in the random
access memory (RAM) or storage 17 of the desktop computer 12, and proceed to
perform further searching relying on the product description to uncover relevant
information. The server 14 can accordingly quickly assemble a collection of
product-related and manufacturer information in the RAM or storage 17 of the
desktop computer 12. The collection of assembled or aggregated information is
then available for the individual's consideration all at once at any time. For
example, information regarding product availability and pricing can be obtained,
including a pre-determined lowest price for comparison with the prices of the
relevant sources. Preferably, the assembled information will also provide the
individual with the name of a source for purchasing the particular product, and,
further, the server can automatically link the individual with the source's site on the
global computer network. As will readily be seen, the system of the invention
permits the individual to avoid the time-consuming hassle of performing multiple
"key word" searches on the global computer network to uncover the desired
collection of product-specific information on a trial-and error and/or step-by-step
basis.

5 In an enhancement of the system, the UPC can be input into a
wireless portable computer 20, e.g., a Portable Digital Assistant (PDA), or wireless
10 internet or server accessible phone and transmitted either directly or indirectly to the
implementing server 14 to obtain product information. With this capability, an
5 individual can investigate a product while present in a retail location and
contemplating purchase of the product. The portable computer 20 may be provided
15 with software to interact through a wireless transmission path with the server 14 and
obtain the information as described above at the retail location. Conversely, PDA's
20 have been developed which include a scanner 16' for reading an encrypted
10 barcode and software for deciphering and storing the encryption. These PDA's can
be used advantageously to provide an individual with a handy tool for easily
25 collecting UPC's while in conventional retail outlets for immediate or later use.

As another enhancement of the system, an additional database 19
30 can be created and located in the individual's desktop or portable computer to
15 maintain a library of UPC'S therein. For example, the UPC codes of various
purchased products can be entered into the library. The library of UPC's is then
transmitted to the implementing server 14 to allow for periodic monitoring of the
35 global computer network 18 to uncover relevant bulletins and/or notices. Thus, for
instance, an individual who purchases a baby stroller can enter the UPC code into
40 20 the desktop computer 12, have the UPC code transmitted to the server 14, and be
automatically informed of any notices relating to the baby stroller (e.g., recalls) or
similar products. In a preferred embodiment, the server 14 generates a hyperlink
45 connection between the desktop computer 12 and, by activation, the relevant site
on the global computer network 18 where the notice is posted. When such an
25 additional database 19 is stored in a wireless portable computer 20 it enables a
50

5 user to readily investigate a range of products while present in a retail location.

10 The implementing server 14 can also be directly linked to certain sites on the global computer network 18. Accordingly, a product manufacturer can have its site linked to the server 14 based on the UPC's of products it manufactures so
5 that upon entry of one or more of the relevant UPC's, an individual will not only view information retrieved from the server's database 11, but also be connected to the
15 linked site on the global network 18. Further, a manufacturer may be permitted to set up a web page on the local site 15 in the implementing server 14 so that when a user enters the UPC of a particular product he will directly communicate with the
20 local web page for the designated product.
10

25 While the use of UPC's with the present invention is convenient, in that the UPC system is currently in place and widely used, it is not actually necessary to implementing the invention. Alternative product identification systems, e.g., the International System of Book Numbers (ISBN), can also be used to initiate
30 a search. Additionally, means may be provided for converting UPC's to such other product identification systems to expand and facilitate product searching. As a further alternative, the administrator of the implementing server/database can
35 create a numeric/alphanumeric identification system for connecting to other information stored therein. By creating such a system, not only products, but also
40 services and businesses can be assigned identification numbers. For example, a restaurant franchise can be assigned an identification number which is placed (in numeric or alphanumeric form or as barcode encryption) on advertisements. An
45 individual can then obtain information regarding the franchise's services (e.g., prices, locations) by entering the identification number into the implementing server
25 and be linked to a site designated by the franchise. Such identification numbers
50

5 also can be conveniently used to communicate with designated web pages on the server.

10 A further capability for facilitating network searching may be provided that enables a user to "plug in" to a graphical browser. The user enters the category
5 of product item to be searched followed by the UPC number in the URL entry line of the browser, and the browser is then used by the implementing server to carry out
15 the product search directly without the user first being connected to a web site for viewing and then searching for the product information. Alternatively without a browser "plug in", the user could just enter a specific URL web address into any
20 graphical global network browser with the optional category and with a UPC or code number to let the implementing server institute the search.

25 The system is especially adaptable to use in sales promotions by enabling a manufacturer to place its UPC, or a server-supplied identifying code, on a magazine or newspaper ad or other document, and directing that the UPC or
30 code be used to access the implementing server for further information. A business card or letterhead may be similarly bar-coded to facilitate contacting a company or its website or e-mail address through the server. Further, a magazine or periodical
35 publisher may index the pages of a publication with such barcodes or use existing barcodes enabling a user to readily order copies of articles or pages from a website
40 or the server by e-mail or even allow the user to enter a discussion group on the particular article or product.

45 A preferred exemplary procedure for utilizing the present invention beginning with a user entering a UPC number until the search results provide stored information for displaying manufacturer, product, web page, and other information,
25 will now be described with reference to FIG. 2.

5 Step 1: A user, by means of an electronic terminal, e.g., a computer, inputs
selected barcode information on the object of the search, e.g., a UPC
number, and a selected optional product category to the web site (URL)
10 of an implementing server containing databases relating the input coded
5 information and product category to other web sites on a global network.

15 Step 2: The server is programmed to run extensive checks to verify that the UPC
number entered is valid. These checks may include making sure that the
length of the number is valid for the category selected, that books begin
20 with "978", that the checksum digit is correct, that no alpha characters
10 are entered where not allowed, and several other steps depending on the
category selected. If the UPC is not valid, a signal is returned to the input
terminal to indicate the UPC is incorrect. A valid UPC is coupled to the
25 next step.

30 Step 3: If a book or audio book category is selected, the UPC number is
15 converted to an ISBN number, and other appropriate conversions may be
carried out. After any necessary conversions, the number is used to
address the server databases.

35 Step 4: The server's UPC manufacturer's databases are queried (using the first 6
digits of the UPC number) to find the most current information on the
40 publisher and/or manufacturer identified by the UPC code. The server's
20 data sources indicate the category or categories of the products for which
the identified publisher and/or manufacturer is registered, and that
45 information is used to verify that the user input the correct optional
product category. If the user inputted an incorrect or unknown category,
25 what data sources to use to find the product will be indicated.

5 Step 5: Many sources are then queried (both local databases and Internet
databases) using the UPC or ISBN number to find the most current
information available on the product of the selected category.

10 Step 6: If the product information is found, the information is sent from the server
5 and stored in memory at the user terminal for use together in a body at
any time. Also, a "Search Results" web page may be displayed with all
15 the appropriate information, including links (either by UPC number or
product description) to many other sources for additional information.

20 Step 7: If the product information is not found, a signal is sent from the server
10 and a web page is displayed indicating such, and allowing the user to
input (Step 1) an alpha description of the product that is being sought. If
25 the manufacturer's information is then found (Step 6), it may be stored
and displayed based on the UPC number entered.

30 Step 8: To further the product information search, the system then reverts to
15 "Step 6", using the user-input alpha description as a link to the other
sources for additional information.

35 Step 9: When all of the selected product and manufacturer information has been
searched and found, it will be collected and stored in a database in
memory at the user terminal enabling the user to readily review all of the
40 found information at one time at any time.

Consequently, by simply once inputting, from an electronic terminal to
an implementing server, selected coded and category information relating to
45 products and their manufacturers, publishers, and commercial or other providers or
suppliers, a user can automatically search and collect a body of pertinent
25 information available from many sites on a computer network and store all of the
50

collected information for consideration at one time.

It will be understood by those of skill in the art that a variety of combinations of hardware and software may be used to implement all of the features of the invention and that the ability to select, assemble, and connect the hardware and adapt and write the software for such combinations, will be readily within the purview of the skilled artisan using the foregoing descriptions and suggestions without the need for undue experimentation. Applicant has assembled and is operating such a system but it will be appreciated that its description here would serve no practical purpose by way of enablement as it would be too specialized and extensive to include in this application and is constantly being changed and updated during testing. Also, technological progress in the field would probably render such a particular current embodiment obsolete by the time this application issues.

Claims

5

10

15

20

25

30

35

40

45

50

55

WHAT IS CLAIMED IS:

1. An interactive search system for obtaining a supply of information relating to the object of the search from a global computer network for presentation to a user, said system comprising:

an implementing server coupled to the global computer network and comprising database means for storing search-object-related information and associated information on where further search-object-related information can be located on the global computer network;

a computer input terminal coupled to said implementing server and operable by a user to send a coded input for accessing said implementing server, said coded input addressing said stored search-object-related information;

means, responsive to said coded input, for activating said implementing server to use said associated information to access said further search-object-related information on the global computer network; and

means for collecting and storing at said computer input terminal said further search-object-related information accessed by said implementing server to provide a supply of search-object-related information from the global computer network ready for presentation to the user in accordance with the coded input.

2. A system as in claim 1, wherein said coded input comprises a barcode.

3. A system as in claim 1, wherein said coded input comprises a UPC code.

5 4. A system as in claim 1, wherein said search-object-related
information comprises product-related information and said coded input comprises
a manufacturer's code and a related product category.

10 5. A system as in claim 1, wherein said coded input comprises a
5 code printed on a document.

15 6. A system as in claim 1, wherein said implementing server has an
administrator and said coded input comprises a code provided by said
administrator.

20 7. A system as in claim 1, further comprising means for scanning
10 said coded input into said computer input terminal.

25 8. A system as in claim 1, wherein said computer input terminal
comprises a wireless portable computer.

30 9. A system as in claim 1, wherein said computer input terminal
comprises a wireless internet phone.

35 10. A system as in claim 1, wherein said computer input terminal
15 comprises a server accessible phone.

40 11. A system as in claim 1, wherein said computer input terminal
comprises means for storing a library of coded inputs for selective transmission to
said implementing server.

45 12. A system as in claim 1, further comprising means, in said
20 implementing server, for prestoring specialized search-object-related information
associated with said coded input, and responsive to said coded input for sending
said associated specialized search-object-related information to said computer
input terminal.

50 13. A system as in claim 1, further comprising means for directly
25

linking said implementing server to certain sites on the global computer network.

14. A system as in claim 1, further comprising means for directly linking said computer input terminal to certain sites on the global computer network.

15. An interactive search method for obtaining a supply of information relating to the object of the search from a global computer network for presentation to a user, comprising the steps of:

inputting, by means of an electronic terminal, a coded input relating to the object of the search, to an implementing server containing databases relating the coded input to web sites on a global network;

checking to verify that the coded input is valid and making any predetermined conversions that are required for the search;

first querying said databases of said implementing server to find web sites on the global network related to said coded input;

second querying the websites found related to said coded input for information regarding the object of the search;

transferring all of the information regarding the object of the search that results from said second querying of the websites, to said electronic terminal for providing a supply of information regarding the object of the search obtained from the global computer network ready for presentation to the user in accordance with the coded input.

16. The method of claim 15, wherein said information regarding the object of the search comprises product-related information.

5 17. The method of claim 15, wherein said coded input comprises a barcode.

10 18. The method of claim 15, wherein said coded input comprises a UPC code.

5 19. The method of claim 15, wherein said coded input comprises a manufacturer's code and a related product category.

15 20. The method of claim 15, wherein said coded input comprises a code printed on a document.

20 21. The method of claim 15, wherein said implementing server has an administrator and said administrator provides said coded input.

25 22. The method of claim 15, wherein said inputting step comprises scanning said coded input into said electronic terminal.

30 23. The method of claim 15, wherein said electronic terminal comprises a wireless portable computer.

15 24. The method of claim 15, wherein said electronic terminal comprises a wireless internet phone.

35 25. The method of claim 15, wherein said electronic terminal comprises a server accessible phone.

40 26. The method of claim 15, further comprising the step of storing a library of coded inputs in said electronic terminal for selective inputting to said implementing server.

27. The method of claim 15, further comprising the steps of:

storing in said implementing server, specialized product-related
information associated with said coded input; and

sending, in response to the input of said coded input, said
associated specialized product-related information to said electronic terminal.

28. The method of claim 15, further comprising the step of directly
linking said implementing server to certain sites on the global computer network.

29. The method of claim 15, further comprising the step of directly
linking said electronic terminal to certain sites on the global computer network.

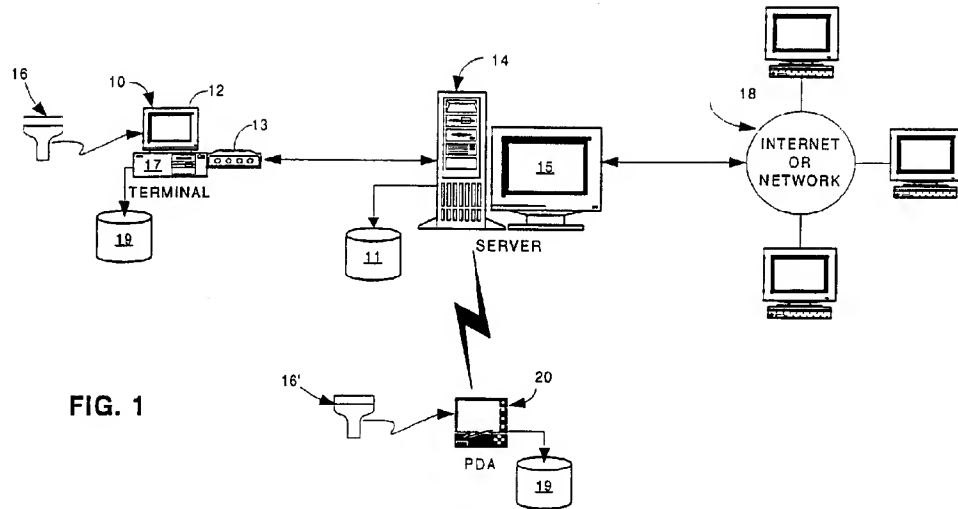


FIG. 1

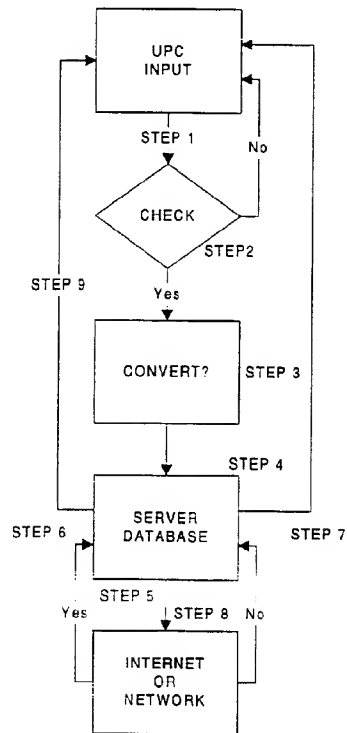


FIG. 2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/01885

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/30; G06F 3/06

US CL : 705/23; 707/1, 3, 4, 5, 10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/23; 707/1, 3, 4, 5, 10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST, WEST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 5,978,773 A (HUDETZ et al) 02 November 1999, abstract, column 5, line 6 to column 12, line 10.	1-29

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
B earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*G* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

01 APRIL 2000

Date of mailing of the international search report

18 APR 2000

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231
Facsimile No. (703) 305-3230Authorized officer
KIM YEN VU

Telephone No. (703) 305-4393